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Lies, damned lies, and statistics on widening access to Russell Group universities

Vikki Boliver

Abstract

This article reports on a forensic examination of the statistical evidence presented in a recent Russell Group report entitled *Opening Doors* which claims that “real progress has been made over the last few years” in relation to widening access at Russell Group universities (Russell Group 2015: 4). I show that several key statistics presented in *Opening Doors* are highly misleading. First, seemingly large improvements in access to Russell Group universities for students from free-school-meal backgrounds are shown to rest on the dubious practice of calculating a percentage increase from a very low base. Secondly, large apparent increases in access for those from state schools and colleges rely on the selective use of an unrepresentative base year. Third, the representation of those from lower social class origins is presented in a positive light without any mention of the fact that the figure had been static for around a decade and that it ~~how this statistic~~ compares (unfavourably-as it happens) to the wider HE sector and UK population. Fourth, apparently encouraging statistics relating to students from low HE participation neighbourhoods are presented, but these concern applicants rather than entrants, and to all UK universities not just Russell Group ones. This article also highlights the failure of *Opening Doors* to acknowledge a growing body of statistical research evidence which indicates that one important barrier to widening access at Russell Group universities is that applicants from less advantaged social backgrounds are less likely to be offered places at these universities than comparably qualified applicants from more advantaged social groups. These studies receive no acknowledgement in the Russell Group publication despite being published in peer-reviewed academic journals by researchers working at Russell Group institutions.

Introduction

The Director of the Office for Fair Access recently called for universities to utilise their wealth of research expertise to solve the problem of “stubborn gaps in participation at highly selective universities”.¹ This makes good sense given that research-intensive universities have the capabilities needed to conduct systematic, rigorous and scientifically objective research on pressing social issues such as the continued under-representation of those from disadvantaged backgrounds at highly selective institutions. It seems encouraging, then, that the Russell Group – the organisation that “represents 24 leading UK universities which are committed to maintaining the very best research” (Russell Group website) – has published a report entitled *Opening Doors: Understanding and overcoming the barriers to university access* (Russell Group, 2015). The report “explores the root causes of the under-representation of students from poorer backgrounds at leading universities (Russell Group 2015: 7) and states that “real progress has been made over the last few years” towards closing the “access gap” (Russell Group 2015: 4). Four statistics are reported in support of the claim that “real progress has been made” which appear to show that there have been significant recent improvements in the representation at Russell Group universities of students eligible for free school meals, of students from state schools, of students from working class families and of students from neighbourhoods with low rates of HE participation. But a close look at each of these statistics reveals that the picture painted is illusory. Moreover, the Russell Group’s decision to frame its report in terms of the “the root causes” of the under-representation of these groups means that pre-university attainment deficits and poor post-16 education choices take centre stage, while questions about the equitableness or otherwise of university admissions practices are entirely absent.

A seemingly large percentage increase – but from a very low base

On page 4 of *Opening Doors* (and again on page 5) it is claimed that there has been a substantial increase in the representation of students eligible for free schools meals at leading universities. The report states:

¹ <http://www.bbc.co.uk/news/education-33430921>

“And real progress has been made over the last few years: for example, in 2013 students eligible for free school meals (FSM) were 39% more likely to win places at leading universities than they were in 2011 (Russell Group 2015: 4).

The statistic of 39% comes from a UCAS report published at the end of 2013 application cycle and leading universities refers to approximately 40 universities (i.e. not just Russell Group institutions) that fall in the top third of the distribution when ranked according to accepted applicants’ average UCAS tariff points (UCAS 2013: 75). The graph that appears in the UCAS report ~~is reproduced below:~~ shows that the

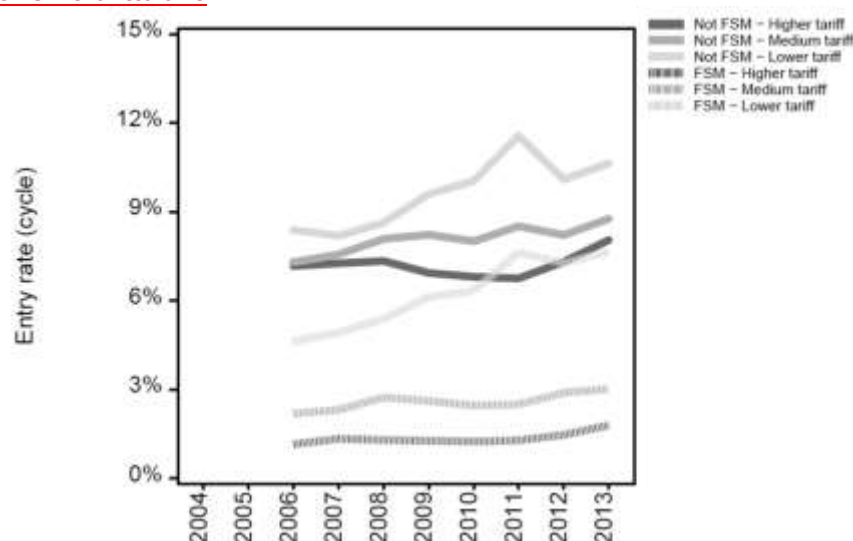


Figure 1.
Source: UCAS (2013: 75)

~~The line at the bottom of the graph is the~~ rate at which young people eligible for free school meals entered higher tariff universities ~~over the period 2006 to 2013. This rate can be seen to have~~ remained flat ~~between 2006 and 2011 for a number of years~~ before increasing slightly between 2011 and 2013 from just over 1 percent to just under 2 percent – hardly the substantial shift suggested by expressing it as a 39% increase. It is highly misleading to present this shift as a percentage increase given that we are talking about an increase from a very low base. It is also misleading to present the percentage increase for one group without saying anything about the trend for comparator groups or the population as a whole. A case in point: the same graph in the UCAS report shows ~~third line from the top of the graph in Figure 1 shows~~ that, between 2011 and 2013, those *not eligible* for free

school meals *also* saw their rate of entry to highly selective universities increase, from around 7 to 8 percent.

An apparent increase over time – owing to an unrepresentative choice of base year

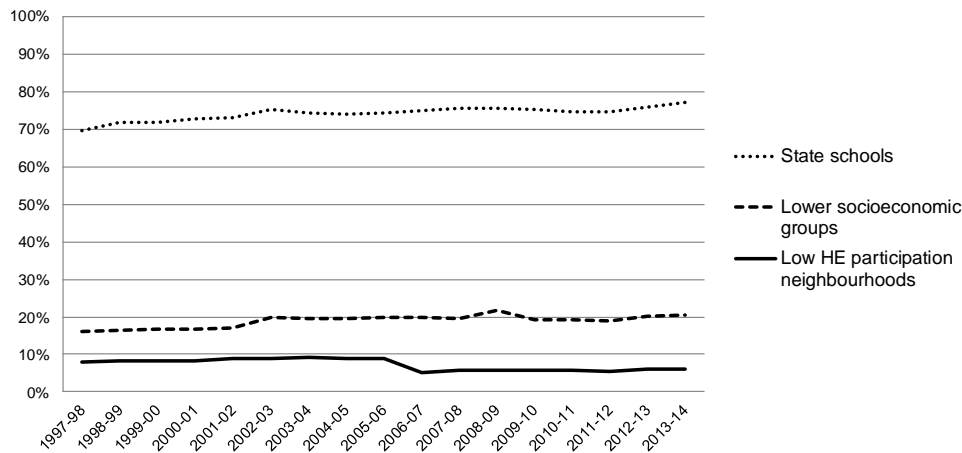
On page 4 of *Opening Doors* (and again on page 5) it is reported that that:

“The proportion of students [at Russell Group universities] from state schools and colleges increased from 68.3% to 75% between 1997 and 2013.”

These figures are reported as having been calculated by the Russell Group from the *UK Performance Indicators on Widening Participation* data tables published annually by the Higher Education Statistics Agency (HESA 1997/98 to 2013/14). The choice of 1997 as the comparator year is justified by this being the year “when these figures were first collected” by HESA (Russell Group 2015: 5). But this comparison year is misleading because in fact the HESA data shows that although the percentage of young full-time first degree entrants at Russell Group universities who were from state schools increased from under 70% to around 75% between 1997/98 and 2002/03, ~~since then~~ the figure ~~then has~~ remained at around 75% for ten years (see Figure 21). There ~~is some sign of was~~ a small upturn ~~between 2011/12 and 2013/14~~ of around 2.56 percentage points between 2011/12 and 2013/14 The Russell Group %could have celebrated the small increase from 74.6% to 77.2% between 2011/12 and 2013/14 (and, encouragingly, the figure increased again to 79.1% in 2014/15) instead of. ~~But it is only by~~ cherry picking an un-representative base year to seemingly substantiate the claim that it is possible to paint a picture of having made “real progress...over last few years”.

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Young full-time entrants to Russell Group universities, 1997/98 to 2013/14



Young full-time entrants to Russell Group universities, 1997/98 to 2014/15

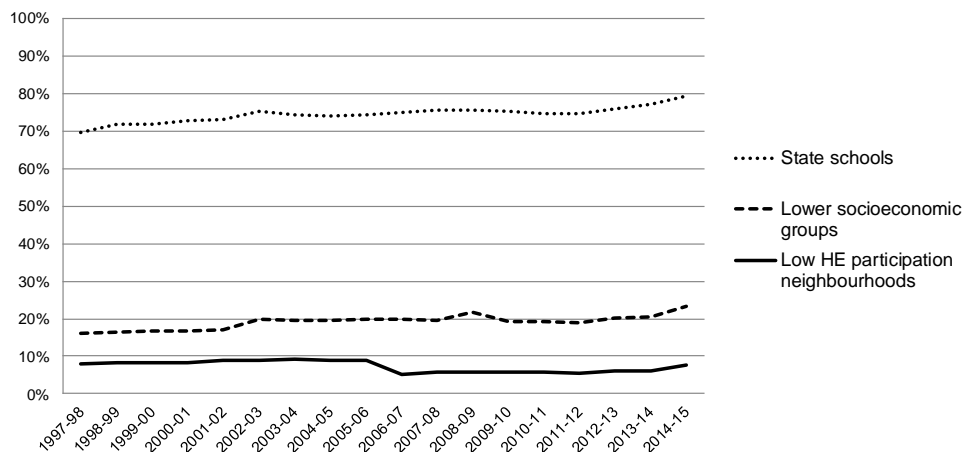


Figure 12.

Source: Author's own calculations from HESA Table T1a for indicated years

Data tables available at: <https://www.hesa.ac.uk/pis/urg2>

Comment [BV1]: I have updated this chart to include the most recent years worth of data.

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It is worthy of note, too, that the figure of 75% appears alongside other statistics under the heading "Huge investment and progress has been

² The 2014/15 data point for those from low HE participation neighbourhoods excludes Russell Group universities in Scotland (Edinburgh and Glasgow) and Northern Ireland (Queen's Belfast) because information for these institutions was absent from the relevant data table. HESA data is used here with the required acknowledgement that "HESA cannot accept responsibility for any inferences or conclusions derived from the data by third parties."

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made...”, giving that impression that this figure is an impressive one. But in fact it compares poorly to the share of state school pupils in UK HEIs overall, which stood at just under 90% in 2013, and the share of all 15 year olds attending state rather than private schools nationally, which is around 93% (DfE 2015).

A seemingly high percentage – but presented without context

On page 5 of *Opening Doors* it is reported that that:

“Around one in five first degree entrants at Russell Group universities in 2012-13 were from lower socioeconomic groups.” (Russell Group 2015: 5)

The statistic, one in five, appears to have been calculated, like the state schools figures, from HESA’s *Performance Indicators on Widening Participation* data tables, and lower socioeconomic groups refers to those who were from NS-SEC classes 4-7. Although the Russell Group report makes no direct claim that this figure has increased in recent years, it appears under the heading “Huge investment and progress has been made...”, giving the impression that this figure has risen recently, or at least that levels of representation are good. There is no mention of the fact that, as the HESA *Performance Indicators on Widening Participation* data reveals (see Figure 1), the figure hasd been more or less constant at around 20 percent for ~~more than~~over a decade (see Figure 2)although, encouragingly, it has -since increased by 3 percentage points). The Russell Group was presumably aware of and could have chosen to report the~~is~~ trend data then available; indeed, the relevant statistics appear in the same data table from which the Russell Group took its statistics on the representation of state school pupils at its universities in 1997 and 2013.

In addition, it is notable that no comparison data ~~is-are~~ provided. If ~~it~~ they had been, it would have been clear that the one in five representation of ~~students from state school students~~lower socioeconomic backgrounds –at Russell Group universities is much lower than for the sector overall at 32.6% (HESA 2014), and for the 17-18 year old UK population at 37.1% (LFS data for 2013).

Look over there!

On page 5 of *Opening Doors* it is stated that:

“Looking across all universities, application rates from disadvantaged groups in England are at record levels. In 2004, demand from 18 year olds in advantaged areas was 4.3 times greater than in disadvantaged areas. This had fallen to 2.7 times greater in 2013.

These statistics are taken from a UCAS statistical report (UCAS 2014^a) and “disadvantaged areas” means neighbourhoods in the lowest quintile of the distribution on a measure of young people’s HE participation rates (aka the POLAR classification). By definition these figures tell us nothing directly about whether access to Russell Group universities has improved or not for young people from low HE participation neighbourhoods, because they refer to *all* universities (not just Russell Group institutions) and to *application rates* (not entry rates). This, it could be argued, amounts to statistical misdirection.

As before, the Russell Group could have chosen to report figures from HESA’s *UK Performance Indicators on Widening Participation* data on the representation of young entrants from low HE participation neighbourhoods at its universities over time; again, these statistics appear in the same data table as those relating to representation of state school students on which *Opening Doors* draws. My calculations from that HESA data (see Figure 21) show that the percentage of young, full-time first degree entrants to Russell Group universities who were from low HE participation neighbourhoods has in fact declined over time, hovering at around 9 percent in the late 1990s and early 2000s before dropping to 5.3 percent in 2006-07 (the year that tuition fees went up to £3000 a year). The figures subsequently recovered very slightly, to reach 6 percent in 2013/14 (and rose again to 7.8% in 2014/15). Again, the over-time data that was available at the time *Opening Doors* was being prepared is pattern flies in the face of ~~its~~the claim of “real progress” in recent years.

Peer reviewed evidence ignored

It is worrying that the Russell Group’s *Opening Doors* publication misrepresents basic statistics about how much progress has been made towards widening access to its member institutions in recent years. It is concerning, too, that *Opening Doors* makes no mention of the growing body of academic research papers published in peer-reviewed journals which have examined whether the admissions decisions made by highly selective universities contribute to the access gap. These academic studies have found that applicants to highly selective universities from traditionally underrepresented

groups are less likely to be offered places than peers from more advantaged backgrounds even when they are comparably qualified. Lower offer rates, controlling statistically for entry qualifications, have been found for applicants from state schools (Boliver 2013; Noden, Shiner and Modood 2014), lower social class backgrounds (Zimdars, Sullivan and Heath 2009; Boliver 2013; Noden, Shiner and Modood 2014), and ethnic minority groups (Taylor 1992; Shiner and Modood 2002; Boliver 2013; Noden, Shiner and Modood 2014). All of these studies had been published at the time *Opening Doors* was being written.³ Moreover, it is clear the Russell Group was aware of the two most recent studies cited above because the Russell Group issued press releases and media comments dismissing their findings on the grounds that key variables were missing from the analysis without so much as a call for further research (Russell Group 2013; Russell Group quoted in *The Guardian*, 23 July 2014). The fact that most of the studies cited above were carried out by academic researchers working at six Russell Group universities makes it particularly perplexing that they have been dismissed out of hand by the Russell Group and ignored entirely in *Opening Doors*.⁴

It might be argued that *Opening Doors* is about the “root causes of under-representation” at highly selective universities, and so what happens after the point of application is beyond the remit of the report. It might also be argued that highly selective universities seek to admit the brightest and best students and so there is no need to question whether admissions decisions are being made on a fair and consistent basis, or to have any truck with evidence that calls this

³ Research published subsequently by UCAS (2015: 59-76) suggests that offer rates from “high tariff providers” to applicants from ethnic minority backgrounds, low HE participation neighbourhoods, and the group eligible for free school meals are within the expected margin of error once predicted A-level grades and specific degree subject and institution applied to are taken into account. This seems encouraging, but further research is needed. In particular, it is not clear whether the findings would hold if actual A-level grades were used (given that non-traditional students may be more likely to have their grades under-predicted); if the focus was on high-demand courses (given that “high tariff providers” have surprisingly high offer rates of over 70% on average for applications with predicted grades of BBB or better); if the analysis included applicants holding qualifications other than A-level (given that non-traditional students often pursue BTEC and Access to HE qualifications while many advantaged students pursue the International Baccalaureate); and if the analysis did not focus solely on 18 year olds (given that non-traditional students often apply as mature students and advantaged students may take gap years). The UCAS publication also lacks detailed analysis of offer rates by school type.

⁴ Bristol University (Modood), Durham University (Boliver), London School of Economics (Shiner, Noden), University of Manchester (Zimdars), Oxford University (Heath), and University College London Institute of Education (Sullivan).

assumption into question. Whatever argument might be made in defence of choosing to frame the issues in terms of “root causes”, the upshot is that the impact of pre-university attainment deficits and poor post-16 education choices are highlighted while questions about the possible role of university admissions decisions making practices are neatly sidestepped.

Conclusions

The Russell Group’s claim in *Opening Doors* that “real progress has been made over the last few years” towards widening access to Russell Group universities is not substantiated by the evidence. What the ~~available data~~ available at the time *Opening Doors* was being prepared shows is that there ~~has~~ been *no real progress* towards widening participation at Russell Group universities for at least the last decade.

It is concerning that the body “representing 24 leading UK universities which are committed to maintaining the very best research” (Russell Group, 2016) has painted such a misleading picture of recent trends, and has failed to engage constructively with academic research suggesting that university admissions decision-making practices contribute to the “access gap”. But crucial to understanding how this came to pass is the fact that the primary function of the Russell Group is to “represent” its member institutions; that is, to offer up a flattering portrayal of its member institutions and their activities. It should not come as a surprise, then, that *Opening Doors* presents a glowing account of its member institutions’ track record on widening participation, achieved by means of a misleading account of the statistical evidence, not when we remember that the Russell Group is ultimately a lobbying organisation.

Though it is not surprising that the Russell Group has been so selective and misleading in its portrayal of key facts in *Opening Doors*, it is still concerning because the institutions the Russell Group “represents” are meant to be places of scientific inquiry and impartial truth seeking. *Opening Doors* cites only two peer reviewed studies carried out by academics in Russell Group universities or elsewhere (Russell Group 2015: 40-41) which does not suggest any real intent to engage seriously with rigorous academic research. There is culpability for this on both sides. There is little excuse for the Russell Group having failed to draw on the research expertise of academics working in its member institutions. And there is little excuse for the Vice Chancellors of Russell Group universities having allowed their

institutions to be “represented” so inaccurately by a lobbying organisation that they themselves direct.

The Director of the Office for Fair Access is no doubt right that “If [highly selective universities] truly harness their wealth of research expertise, it could bring a step change in progress” towards improving access to these institutions.⁵ The critique of *Opening Doors* presented here makes it clear that we cannot depend upon lobbying organisations such as the Russell Group to set out the evidence in a rigorous and objective manner. What is needed is systematic, scientific research which is openly and critically debated. University academics, not lobbying organisations, have a key role to play.

⁵ <http://www.bbc.co.uk/news/education-33430921>

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Acknowledgements

~~I am grateful to UCAS for permitting the reproduction of a graph from one of their publications in this article. Thanks also to HESA for permitting me to draw on its published statistics. It is noted that "HESA cannot accept responsibility for any inferences or conclusions derived from the data by third parties."~~